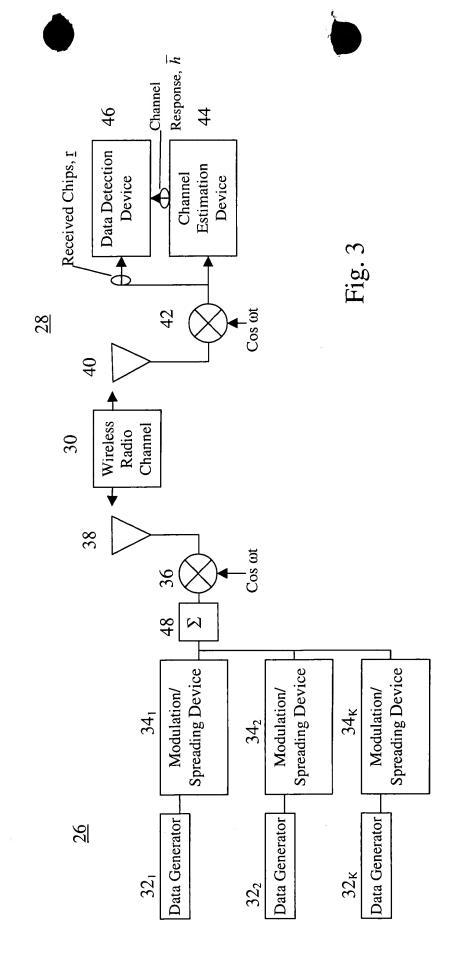


		Communication <u>16</u> Burst	
22	20	24	18
Data Burst	Midamble	Data Burst	Guard Period

Fig. 2



Construct a model of the received midamble sequence data,  $\bar{r}$ , the channel response,  $\bar{h}$ , and the known midamble codes, such as

$$\left[\sum_{k=1}^K M^{(k)}\right] \overline{h} = \overline{r}$$

Reconfigure the model by replacing the known midamble codes with K right circulant matrix blocks, B, such as

$$\left[\sum_{k=1}^{K} M^{(k)}\right] = \begin{bmatrix} B \\ B \\ \vdots \\ B \end{bmatrix}$$

50

52

Solve the reconfigure model using a least squares solution, such as by a discrete fourier transform or a single cyclic correlator solution

Fig. 4